

WHAT IS CLAIMED IS:

1. A fuser unit for an EP printing device, said fuser unit comprising:
a unit frame;
a hot roll mounted in said frame;
a backup roll mounted in said frame and disposed in nipped relationship with
5 said hot roll;
a fuser drive motor mounted in said frame; and
a drive train mounted in said frame and drivingly connected to said fuser drive motor, said drive train having at least one component thereof for driving at least one of said hot roll and said backup roll.
2. The fuser of claim 1, including media drive rolls defining a duplexing path in said fuser, and said drive train having at least another component thereof for driving said media drive rolls.
3. The fuser of claim 2, said drive train adapted to be uncoupled from said hot roll during duplex routing of media through said fuser.
4. The fuser of claim 2, said fuser motor being bi-directional for rotating in a first direction for printing and for rotating in a second direction for transporting media to said duplexing path.
5. The fuser of claim 4, said drive train adapted to be uncoupled from said hot roll during duplex routing of media through said fuser.
6. The fuser of claim 5, including a swing arm assembly adapted for coupling said hot roll to said drive train and for uncoupling said hot roll from said drive train.
7. The fuser of claim 1, including a swing arm assembly adapted for coupling said hot roll to said drive train and for uncoupling said hot roll from said drive train.
8. The fuser of claim 1, said frame including a plate and said motor and said drive train being associated with said plate for positioning thereby.

9. A drive system for a fuser having a fuser unit frame and a hot roll mounted in the frame, said drive system comprising:

a motor mounted in the frame; and

5 a drive train operatively connected to said motor, said drive train including a plurality of individual gears each mounted to said frame and including a hot roll gear in said drive train for driving said hot roll.

10. The drive system of claim 9, said drive train adapted to be engaged with and disengaged from said hot roll gear.

11. The drive system of claim 9, said motor being a bi-directional motor.

12. The drive system of claim 11, said drive train adapted to be engaged with and disengaged from said hot roll gear.

13. The drive system of claim 12, said drive train including a swing arm assembly selective coupled to and uncoupled from said hot roll gear.

14. The drive system of claim 13, said frame including a plate, and said motor and said drive train being connected to said plate for positioning thereby.

15. The drive system of claim 9, said frame including a plate and said motor and said drive train being connected to said plate for positioning thereby.

16. The drive system of claim 9, including a swing arm assembly having a bracket and a primary gear connected in said drive train for rotation by said drive motor and a further gear connected to said bracket and rotated by said primary gear, said further gear being couplable to and uncouplable from said hot roll gear upon
5 movement of said bracket.

17. The drive system of claim 16, said frame including a plate and said motor, said drive train and said swing arm assembly being mounted to said plate.

18. A method for operating a fuser of an EP printing device, said method comprising:

providing a frame, a hot roll, a drive train and a drive motor as an integral unit;

providing a hot roll gear as part of the drive train, the hot roll gear being
5 connected to the hot roll for rotating the hot roll;

operating the drive motor in a first direction when passing media past the hot roll; and

operating the drive motor in an opposite direction for routing the media to a duplexing path.

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19. The method of claim 18, including providing a swing arm assembly having gears driven by the drive train, one of the gears of the swing arm assembly being driving coupled with and uncoupled from the hot roll gear; and moving the swing arm assembly upon reversals of the drive motor between the first direction and
5 the opposite direction for coupling and uncoupling the hot roll gear.

20. The method of claim 18, including maintaining continuous driving connection between the drive motor and the drive train during reversals in direction of rotation of the motor.

21. The method of claim 18, including one of coupling the hot roll gear with the drive train and uncoupling the hot roll gear from the drive train upon reversals in direction of rotation of the motor.